

Abstract of the Invention

A system and associated methodology is provided that is adapted to infer what to do with an item, and more particularly whether to archive and/or keep active an item in a more active, easy-to-access store based upon a cost-benefit analysis. The cost-benefit analysis determines the overhead associated with keeping the item active (e.g., not archiving it) versus the gains in connection with having quick and easy access to the item. The cost of maintaining an item in an active state is measured in terms of the size of the item which, in turn, affects the amount of space needed to store it. The benefit of keeping the item active is measured in terms of a probabilistic determination describing how a user will access the item in the future, which is a reflection of the utility of the item in an accessible state. The invention leverages notions of temporal sensitivity of the likelihood that an item will be needed in the future such that determined values and inferences can be dynamically updated over time. Items having a small probability of being accessed again after an initial review are categorized as one-shot items.